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# **MOTOR TRANSPORT OPERATOR TRAINING: AN APPROACH TO PREPARING TRAINING MANAGERS AND INSTRUCTORS TO DESIGN, CONDUCT, AND EVALUATE PERFORMANCE ORIENTED TRAINING**

by

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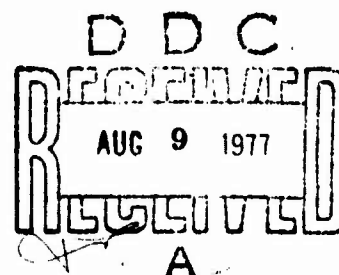
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report describes an R&D effort to train managers and trainers of the Support Command of an Infantry Division in how to design, implement, and evaluate a performance-oriented training program.  The effort was conducted within the Transportation Company of the Supply and Transportation Battalion, 7th Infantry Division, Fort Ord, California. Researchers, company officers, and NCOs worked together to develop a mission oriented training program for MOS 04C, Motor Transport Operator. → NEXT		

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The work was carried on within the constraints of the unit's primary mission of providing logistical support to other newly activated units in the Division.

The fundamental concepts set forth in this effort will permit the subsequent validation of tasks, skill levels, and performance tests for MOS 64C in an infantry division and provide a prototype for skill development of other MOSs in a Division Support Command.

The products of the R&D effort are (1) a tactical mission oriented task list for the motor transport operator, stratified by skill level and type of vehicle, (2) a draft performance test to measure the basic skill level of motor transport operators on the 2 1/2 and 5 ton cargo trucks in the performance of a tactical mission, and (3) a field course simulating the conditions of a tactical situation in an Infantry Division's Transportation Company.

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## SUMMARY AND CONCLUSIONS

### PURPOSE

The overall objective of Work Unit DIV SKILL is to develop training programs to train officers and NCOs in the newly activated 7th Infantry Division in how to design, conduct, and evaluate performance-oriented training programs. This report describes Phase I of the R&D effort. Using an informal approach, the objective of Phase I was to train officers and NCOs of the Division's Support Command (DISCOM) in skill proficiency training techniques. Training was to be accomplished by giving DISCOM training personnel guided practice in developing, implementing, and evaluating a training program for a combat support MOS.

### APPROACH

The work was carried out in the Transportation Company of DISCOM's Supply and Transportation Battalion, the focus being on MOS 64C, Motor Transport Operator. Personnel from the Transportation Company were assigned to work with researchers in the development of a training program. The initial work consisted of determining the missions assigned to the operator, identifying the tasks performed by the operator at each phase of the mission, and then preparing performance tests to measure operator proficiency in performing the tasks necessary to accomplish the mission. External sources of information used in preparing the task list were Army publications and observation of the Motor Transport Operator's Course conducted at Fort Ord, California. A special team of experts from the Supply and Transportation Battalion assigned each task to one of four skill levels (Basic, Intermediate, Advanced, Master) so that the resulting prototype task list would be compatible with the developing Enlisted Personnel Management System.

### RESULTS

Transportation Company personnel gained experience in developing a mission-oriented, skill level stratified, task list for MOS 64C and gained experience in developing performance tests for operators of 2½ and 5 ton cargo trucks at the basic skill level. A mission-oriented field course was developed and NCOs were instructed in using performance tests to diagnose the present level of operator proficiency.

Significant products of the R&D effort were:

1. A comprehensive task list for MOS 64C. In effect, nine task lists were prepared because the tasks are stratified by skill level (basic, intermediate, and advanced) and by type of vehicle (¼ ton utility truck, 2½ or 5 ton cargo truck, and 5 ton tractor with 12 ton

trailer). Moreover, the tasks, by skill level and by type of vehicle, are classified by phases of a tactical mission. This task list can be used as a basis for (a) developing an ARTEP for the Division's Transportation Company, and (b) developing a comprehensive set of performance tests to be used in conjunction with the new Enlisted Personnel Management System.

2. A series of basic skill level performance tests for operators of 2½ or 5 ton cargo trucks. These tests can be used to (a) determine the current level of operator proficiency, (b) guide remedial training to correct deficiencies, and (c) evaluate the effectiveness of that training. They can also be used as a model for the preparation of performance tests for other MOS 64C skill levels and vehicles and for the preparation of performance tests for other combat support MOSs.

3. A mission-oriented field driving course, in which the driver receives his mission, and on his own, proceeds through a series of tasks to accomplish his mission. He is evaluated by a qualified NCO on his actual performance of each task. The course is designed for field use, for the training and testing of drivers at all skill levels, and can be easily adapted to the missions and conditions confronting drivers in all types of tactical units.

## CONCLUSIONS

1. A systematic approach to developing individual skill level proficiency can be attained through utilization of mission-oriented task lists, the corresponding performance tests, and a mission simulated course for individual evaluation.

2. An informal approach to training can be effective.

3. It is possible to conduct R&D activities in a military unit within the constraints imposed by the unit's need to activate as well as provide logistical support to other units.

## PREFACE

This report is one of two prepared under Work Unit DIV SKILL. Sponsored by the US Army Research Institute for the Behavioral and Social Sciences, DIV SKILL sought to develop training programs to help unit training managers and trainers to employ performance-based practices in training and evaluating individuals in the unit. The related DIV SKILL report is "The Development and Trial Evaluation of Alternate Programs for Unit Training Managers and Trainers."

DIV SKILL was a part of the work program of HumRRO's Western Division at the Presidio of Monterey, California, with Dr. Howard H. McFann as Director. Members of the HumRRO research staff were Dr. William H. Melching, principal investigator, Dr. John E. Taylor, Dr. Morris Showel, Ms. Jacklyn E. Hungerland, and COL (USA, Ret.) Mark F. Brennan.

Mr. Jack Sternberg of the Army Research Institute served as the technical monitor. Administrative support for the work was provided by the US Army Research Institute Field Unit, Presidio of Monterey, the R&D coordinator of which was, successively, COL Ullrich Hermann and MAJ Joel S. Stephenson.

The cooperation and assistance of officers and men of the 7th Infantry Division, Fort Ord, California, where the study was carried out, are gratefully acknowledged.

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## INTRODUCTION

The overall goal of Work Unit DIV SKILL was to develop training programs that will enable unit training managers and trainers to employ performance-based practices in training and evaluating the performance of men in the unit. The focus of the effort was on individual training and performance.

This report describes an informal procedure that was used to help unit training managers and trainers perform those tasks.

## BACKGROUND

Training should prepare the soldier for job and duty performance. Unit operations, no matter how well planned, can never be executed any better than the ability of each individual to perform the required duties of his job.

The unit commander who has the responsibility of welding together a smoothly functioning tactical or combat support unit may receive men for his unit from a variety of sources. Some men who join the unit may be recent graduates of Advanced Individual Training courses from training centers. As such, they are qualified in their MOS only at entry level capabilities. Therefore, they will likely require additional training in order to acquire the remaining skills of their MOS and grade.

Other men may be graduates of Advanced Courses conducted by the service schools. They will have acquired many of the skills needed for higher grades in their MOS. However, these men must acquire the supervisory skills needed by the higher grades, and they need the opportunity to practice these skills in a unit setting.

A soldier may transfer from another similar unit where he served in the same MOS and grade. He should possess the required skills, but unless some systematic procedure is used for determining his skill level, his degree of skill proficiency remains a question.

A soldier who transfers from a unit where he has been serving in some other MOS is usually a candidate for considerable refresher training in the skills for his MOS and grade. An evaluation of his present skill level must be made to determine the training he should receive.

Compounding the unit commander's training responsibilities is the Army's newly instituted Enlisted Personnel Management System (EPMS). This system establishes a number of progressively more difficult skill levels for each Military Occupational Specialty (MOS), with progression to an advanced skill level dependent on demonstrated mastery of the

skills involved. It is the unit commander's responsibility to provide those training opportunities which will allow an individual to acquire those skills which are necessary to progress from one skill level to another.

#### PROBLEM

Within the past decade, major shifts in the Army's training philosophy have occurred. The use of the lecture method for group instruction, for example, has given way to an interest in individual, hands-on performance training. The emphasis has shifted from the instructor and what he is doing, to the soldier and his demonstrated capabilities. Soldiers learn by doing, not by listening or merely watching. Performance training makes the student active and centers instruction around him--giving him the time and support he needs in order to learn. Significantly, the training emphasis is shifting from the training centers and service schools to the units.

At the same time, personnel assigned as training managers in TO&E units seldom have opportunity to practice the performance of training management skills prior to assignment. Immediately upon assignment, they are expected to identify specific performance deficiencies, develop needed performance-based training programs, and maintain a high level of performance capability in the men in their unit.

A similar situation obtains for personnel who are assigned duties as unit trainers. If they attended an instructor training course prior to the introduction of performance-oriented training, it is likely that their instruction was "lecture" rather than "hands-on" oriented. If they did not attend an instructor training course prior to their new assignment, they will probably model their future behavior on what they have seen in the past...lecture rather than hands-on training. In either case, these trainers will be ill-prepared to administer individual performance tests, evaluate the performance capabilities of individual soldiers, or conduct performance-based training.

If unit training managers and trainers are to employ performance-based practices in training and evaluating men, training programs that will permit them to acquire the needed knowledge and skills must be provided. Ideally, these programs should be self-contained, capable of easy administration within the unit, and designed to provide direct, hands-on practice to managers and trainers. Additionally, since unit training personnel must be able to train their replacements, the need for simple, easily administered programs is re-emphasized.

#### OVERALL RESEARCH PLAN

The work was performed in conjunction with the 7th Infantry Division located at Fort Ord, California, and it was undertaken in three phases.

The major goal of each phase was as follows:

- Phase I - Train managers and trainers in the Division Support Command in how to design, implement, and evaluate a performance-oriented training program.
- Phase II - Develop alternate training programs for managers and trainers in the Division combat elements.
- Phase III - Examine the feasibility of implementing the programs in field units and obtain data to help evaluate the relative effectiveness of the programs.

The present report describes the R&D activities conducted under Phase I. A description of the activities and products of Phases II and III is provided in a separate report entitled "The Development and Trial Evaluation of Alternate Programs for Unit Training Managers and Trainers."

## RESEARCH AND DEVELOPMENT EFFORT IN DIVISION SUPPORT COMMAND

### OBJECTIVE AND APPROACH

The objective of Phase I of the research and development effort was to train managers and trainers in the Division Support Command (DISCOM) in how to design, implement, and evaluate a performance-oriented training program. This objective was to be accomplished by assisting DISCOM personnel in the development, implementation, and evaluation of programs of instruction for one or two MOSs within DISCOM.<sup>1</sup> It was hoped that as a result of this experience, managers and instructors would acquire the capability to prepare programs of instruction for other MOSs within DISCOM. This report presents the results of the Phase I research and development effort.

### SITE OF THE R AND D EFFORT

The R&D effort was conducted within the DISCOM of the 7th Infantry Division at Fort Ord, California, during the period March through September 1975. During this period of time, the Division was undergoing activation and was faced with the tasks of securing and assigning personnel, equipment, and facilities and organizing to carry out its TO&E mission. DISCOM's task was particularly difficult because in addition to undergoing activation, it had the responsibility of immediately providing logistical support for the Division's newly activated combat brigades. Little or no time was available for training. This situation posed a serious challenge for the research because it was essential that the R&D effort not interfere with the operations of DISCOM units. Patience and flexibility were essential.

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<sup>1</sup>A more formal approach to training managers and instructors was carried out in one of the Division's combat brigades under Phases II and III of the research and development effort.

## PLANNED AND ACCOMPLISHED RESEARCH AND DEVELOPMENT ACTIVITIES

## SELECTION OF MOS

Early in March 1975, members of the HumRRO and DISCOM staffs met to select the particular MOS which would serve as the vehicle for the R&D effort. As a result of these meetings, it was decided to concentrate on the Motor Transport Operator, MOS 64C 20/30. The decision to select this MOS was based on three facts. First, it is a relatively high-density MOS. Motor transport operators are found both in DISCOM units and in the combat brigades. Second, the motor transport operator performs a variety of tasks. In addition to driving vehicles ranging from  $\frac{1}{4}$  ton trucks to 5 ton tractors towing 12 ton trailers, he is required to use a map, fill out forms, and perform some maintenance on his vehicles. Third, the motor transport operator increasingly is required to perform without direct supervision by his superior. In the course of delivering cargo, particularly in tactical situations, he is frequently on his own. The DISCOM commander was particularly desirous that the training program prepare the motor transport operator to complete his mission despite obstacles and without the prompting and prodding normally provided by a supervisor.

## SPECIFIC RESEARCH ACTIVITIES

The research design outlined a number of research activities which were to be carried out in order to accomplish the Phase I objective. The manner in which these activities were carried out is described below.

## Development of Task Lists

The first steps in the development of a program of instruction were to (1) identify the mission normally assigned to the motor transport operator, (2) identify the critical phases of the mission, (3) identify the tasks performed by the motor transport operator at each phase of the mission, and (4) classify the tasks by skill level to facilitate the integration of the program of instruction with the developing EPMS.

Since a task list for the motor transport operator beyond the AIT level was not available, and since the R&D effort was intended to be a joint military-HumRRO project, DISCOM's Transportation Company was asked to assign an individual to work with HumRRO personnel in carrying out the steps described above. The commanding officer of the company assigned his Training NCO the prime responsibility for filling this role. As a result of a collaborative effort between this NCO and the researcher, it was possible to identify the tactical mission normally assigned to a motor transport operator, to list the critical phases of

the mission, and to develop a preliminary list of the tasks performed by the operator in the course of accomplishing the tactical mission.

#### The Mission and Its Phases

It was agreed that one of the primary missions of the Division's Transportation Company in a tactical situation is to transport cargo from the supply points to the combat units and return. The motor transport operator is required to accomplish this despite obstacles which might be encountered enroute. It also was agreed that the mission could be analyzed into 11 possible phases:

- |                            |                            |
|----------------------------|----------------------------|
| 1. Operations              | 7. Enroute to Supply Point |
| 2. Motor Pool              | 8. Supply Point            |
| 3. Enroute to Supply Point | 9. Enroute to Motor Pool   |
| 4. Supply Point            | 10. Motor Pool             |
| 5. Enroute to Objective    | 11. Operations             |
| 6. Objective               |                            |

A schematic of the mission and its phases is shown in Figure 1.

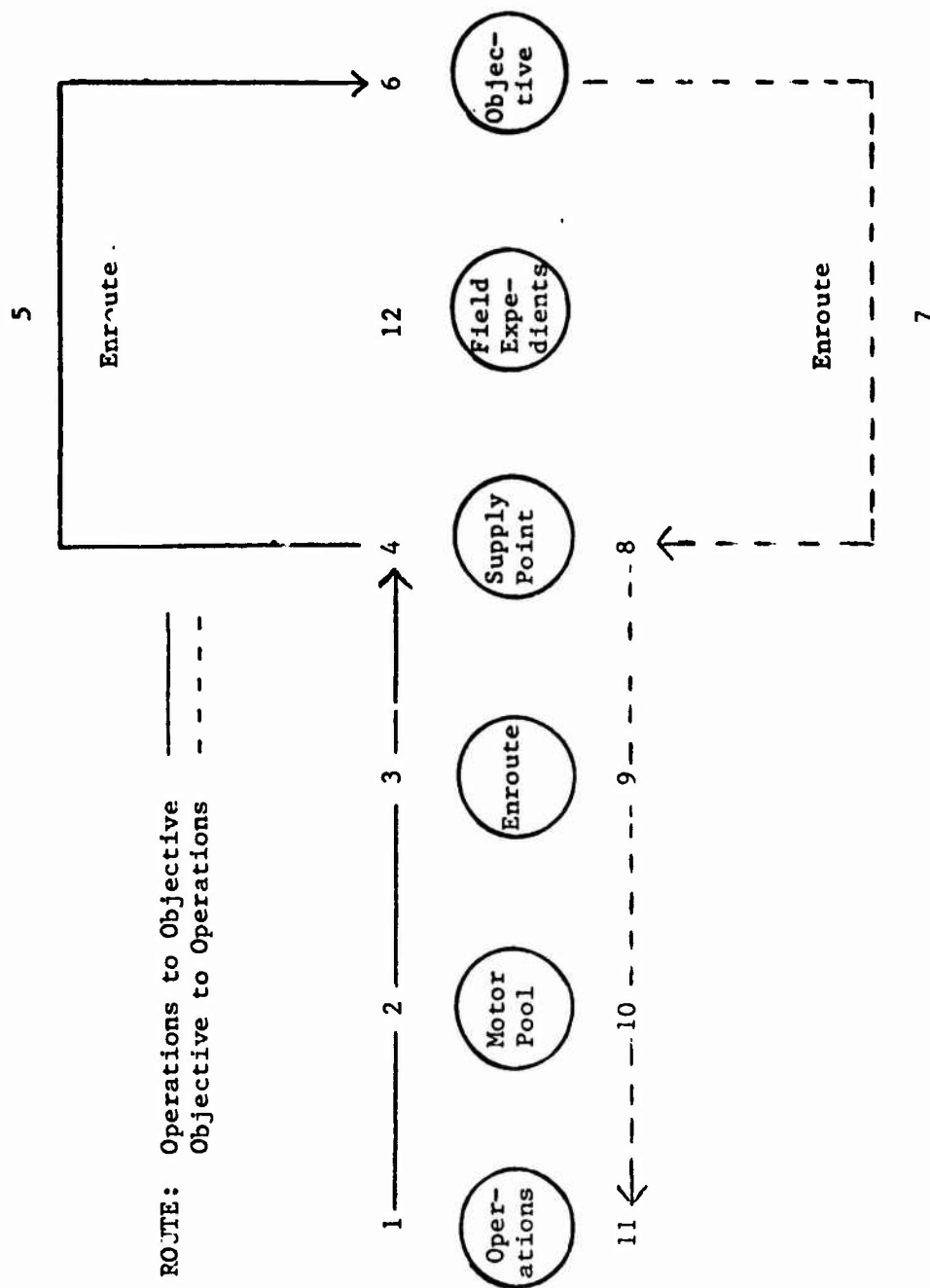
The development of the task list was dependent upon the identification of the mission and its subsequent breakout into phases. At each phase, the tasks were identified which, when performed, contributed to the accomplishment of that part of the mission.

#### Identification of Tasks

Once the phases were determined, the selection of tasks for each phase was begun. For example, tasks appropriate for the Operations phase had to be listed. Items such as "Receives a mission," "Receives a map with route to be followed clearly marked," "Makes a strip map or overlay from a map on which route has been clearly marked," and "Selects route to follow" are examples. The selection of appropriate tasks came from a number of sources: (1) from the officers and NCOs of the Transportation Company who could verify the existence of the tasks through personal experience, (2) from Field Manuals and Technical Manuals<sup>1</sup> pertaining to Transportation Company operations and Motor

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<sup>1</sup>TM 21-300 Driver's Selection and Training (Wheeled Vehicle)  
TM 21-305 Manual for the Wheeled Vehicle Driver  
TM 9-2320-209-10 Operator's Manual for 2½ Ton, 6x6  
TM 9-2320-218-10 Operator's Manual for Truck, Utility: ½ Ton, 4x4  
FM 20-22 Vehicle Recovery Operations  
TRADOC Pam 600-13, Motor Transport Operator, MOS 64C 20/30  
DA Pam 12-64C Enlisted Evaluation System, Study Guide for Maintaining MOS Proficiency in MOS 64C, Motor Transport Operator



**Figure 1. Schematic of the Mission of Motor Transport Operator**

Transport Operator training, (3) from the researchers previous work with Motor Transport Operator training in AIT, and (4) from the experience of the researchers in military training and combat operations.

As tasks were identified, they were typed on 3x5 cards, a separate task being typed on each card. As might be expected, most tasks involved the operator taking some action with or on a vehicle. If a particular task applied to more than one type of vehicle, duplicate cards were prepared. In effect, a task file was prepared, the file containing cards which described the task and the type of vehicle, if relevant, to which the task applied. Cards were used to facilitate the subsequent review of the tasks by officers and NCOs in the Supply and Transportation Battalion.

#### Classification of Tasks

Very early in the development of the task file, it became apparent that it would be necessary to classify the tasks into categories to facilitate processing. The most meaningful categorization system appeared to be the type of vehicle used by the motor transport operator. Accordingly, the cards were classified into five vehicle-type categories. Two additional categories were also established, one for tasks for which the type of vehicle was immaterial and the other for field-expedient tasks. The seven categories, eventually identified by sets of 3x5 cards of unique colors, with examples of tasks within each category, are shown below.

##### $\frac{1}{4}$ ton utility truck

- Drives truck on hard surface roads . . . all grades
- Performs before operations inspection and servicing
- Installs doors and side curtains on truck

##### 2 $\frac{1}{2}$ ton cargo truck

- Drives truck on hard surface roads . . . all grades
- Performs before operations inspection and servicing

##### 5 ton cargo truck

- Drives truck on hard surface roads . . . all grades
- Performs before operations inspection and servicing

##### 5 ton tractor-12 ton trailer

- Drives truck with trailer on hard surface roads . . . all grades
- Performs before operations inspection and servicing
- Installs sideboards on trailer



**Other trailers**

Installs sideboards on trailer

**Field expedients**

Makes field expedient repair of leaking low pressure line  
 Makes field expedient repair of broken fan belt  
 Uses field expedient method to elevate truck and change wheel

**Vehicle immaterial**

Makes entries on DA Form 2400  
 Executes hand signals  
 Responds to international road signs  
 Follows pre-selected route to Supply Point/Motor Pool  
 Measures the curved line distance between two points on a map

**Validation of Tasks and Assignment to Skill Levels**

The seven sets of cards were then submitted to ten experienced officers and NCOs in the Supply and Transportation Battalion for review. These experts suggested additions or deletions to the task list, corrected errors in terminology, and then independently sorted the cards into four piles depending on the particular skill level to which they felt each task was appropriate. The skill levels were identified as Basic, Intermediate, Advanced, and Master, and were meant to correspond to the first four of the five skill levels in the developing EPMS. Sorting into skill levels was done in order to facilitate integration of the motor transport operator's training program with the EPMS.

Wide differences in assignment of tasks to skill levels were reconciled by a team of three experts from the Transportation Company--the commanding officer, executive officer, and truckmaster. Each of the questionable tasks was discussed and a consensus reached on its assignment to a skill level. Their reconciliation of differences in skill level assignments of tasks was facilitated by giving them a more precise definition of terms. Consistent with the developing EPMS, the following definitions were given to the three experts:

<u>Capability</u>	<u>Skill Level</u>	<u>Rank</u>
Basic	1	E-1 to E-4
Intermediate	2	E-5
Advanced	3	E-6
Master	4	E-7

As a result of the above validation procedure, it was decided to (1) consider the 2½ and 5 ton cargo trucks to be interchangeable for both training and testing purposes, (2) integrate training and testing on "other trailers" with training and testing on the ¼ ton utility

truck and the 2½ or 5 ton cargo trucks, and (3) establish three rather than four skill levels. The decision to merge the 2½ and 5 ton cargo trucks was prompted by the fact that these two vehicles are very similar, and skill on one is easily transferable to the other. The decision to integrate "other trailers" was prompted by the fact that the trailer must be used in conjunction with the truck that tows it. The decision to establish only three skill levels was prompted by the fact that very few tasks were assigned to the Master category.

#### Assignment of Tasks to Phases of Mission

Assignment of tasks, by skill level, to mission phases was carried out by the researcher, in consultation with the Training NCO. This task was not difficult because prior knowledge about the phases of the mission influenced the identification of tasks to be performed and because certain tasks, by their nature, must be performed in a particular phase. For example, "Performs before operations inspection and servicing" is performed in the motor pool. "Drives truck with trailer on hard surface roads" is performed enroute to or from the objective. The assignment of tasks to mission phases was subsequently reviewed by three officers in the Transportation Company and by the commanding officer of the Supply and Transportation Battalion.

#### First Form of Task Lists

The culmination of the effort to develop a task list for the motor transport operator is shown in Appendixes A, B, and C. In effect, three task lists were developed, one for the operator of the ½ ton utility truck, one for the operator of the 2½ to 5 ton cargo truck, and one for the operator of the 5 ton tractor-12 ton trailer. All three lists include tasks for which the vehicle is immaterial, but which are nevertheless necessary if the mission is to be accomplished. Each of these task lists is made up of three subordinate lists, one designed for the basic operator, one for the intermediate operator, and one for the advanced operator. It was assumed that the intermediate operator can perform all basic operator tasks and that the advanced operator can perform all basic and intermediate operator tasks. The main differences between the basic, intermediate, and advanced operator task lists for a particular vehicle lie in tasks concerned with the trailer, field expedient repairs, winching, and using a map.

The organizing framework for the tasks on each of the nine task lists (three types of vehicles x three skill levels) is the mission normally assigned to a motor transport operator of a Division Transportation Company, broken down into its component phases. The mission is to transport cargo from a supply point to combat units and then return. Examples of tasks within each phase for the basic skill level on the ½ ton utility truck are shown below.

#### Operations

Receives mission.

**Motor Pool**

Performs BEFORE operations inspection and servicing.

Enroute: Motor Pool to Supply Point

Executes hand signals.

**Supply Point**

Supervises loading of cargo into truck/trailer.

Enroute: Supply Point to Objective

Drives truck with and without trailer cross-country (off road).  
Recognizes events and features which may be of intelligence value.

**Objective**

Secures signature on receipt for cargo delivered.

Enroute: Objective to Supply Point

Follows pre-selected route to Supply Point.  
Escapes an ambush.

**Supply Point**

Returns signed receipt to NCO.

Enroute: Supply Point to Motor Pool

Responds to US and International road signs.

**Motor Pool**

Makes entries on DA Forms 2400, 2404, and 2408-1.

**Operations**

Reports information of intelligence value.

**Field Expedient Tasks**

Special note should be made of the grouping of field-expedient tasks on the task lists. While these tasks would normally be performed while the operator was enroute, away from the motor pool, they do not appear under "enroute," but rather in a special Field Expedient Station. This was done to facilitate the development and implementation of

economically feasible performance tests. To insist that field expedient tasks be tested where they normally occur in the course of a mission would be extremely expensive. An example may clarify this point. One of the field expedient tasks is "Makes a field expedient repair of a punctured fuel tank." It is not economically feasible to puncture the fuel tank of the operator's vehicle while enroute. It is feasible to set up a discarded fuel tank in a designated area, fill it with water, puncture it, and then require the operator to make a field expedient repair of the tank.

### Development of Tests

The nine task lists, organized by phase of mission, constituted the framework within which performance tests would be constructed to determine the operator's current level of proficiency, to indicate areas where remedial training is needed to correct deficiencies, and to indicate what additional skill training is needed to advance to higher skill levels.

The only performance tests currently available for MOS 64C 20/30 are found in TRADOC Pamphlet 600-13 (2 October 1973), and the tests in this publication are designed to measure an operator's proficiency at the end of Advanced Individual Training (AIT). They are not designed to measure operator proficiency in a unit (post-AIT) setting. The task list, however, is based on the tasks to be performed in a unit setting. As such, the basic skill level lists include most of the tasks found in the TRADOC Pamphlet plus a number of other tasks that the operator is expected to learn while in his unit.<sup>1</sup> The intermediate and advanced skill level lists are even more comprehensive. Some examples of tasks not included in the TRADOC Pamphlet, but included on the basic skill level list for the operator of a 2½ or 5 ton cargo truck are:

- Makes field expedient repair of leaking low-pressure line.
- Supervises loading of cargo into truck/trailer.
- Lashes cargo in truck/trailer to prevent shifting.
- Installs/removes bows and soft top on truck/trailer.
- Uses authorized equipment to elevate truck/trailer and change wheel.

The R&D problem then was to construct performance tests for those tasks on the task list which did not appear in the TRADOC Pamphlet, and to integrate these tests into a tactical mission setting.

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<sup>1</sup>Tasks concerned with convoy driving were not included on the task list because the R&D emphasis was on preparing the motor transport operator to perform on his own.

### Test Situations

Working with personnel of the Transportation Company and the Supply and Transportation Battalion, 25 draft performance tests, each outlining the situation, conditions, support requirements, and performance measures, were prepared for Skill Level 1 (Basic) operators of 2½ and 5 ton cargo trucks. (See Appendix D.)

Each test situation contains a description of the situation. (If the operator does not actually encounter the situation, the situation is read to him by the NCO evaluator.) The conditions under which the test is to take place are listed so as to be compatible with the overall tactical situation and the mission. Support requirements in terms of weapons, equipment, and personnel are enumerated. The performance measures on which the soldier is evaluated are a series of actions, which when performed correctly, make up the accomplishment of the task. When possible, the standards the operator is to meet are defined in a special paragraph, if these standards are not already defined in the performance measures.

### Test Course

Transportation Company personnel laid out a Test Course on a separate area of the Fort Ord Military Reservation. It is designed to simulate the field tactical conditions which might be encountered by the Division's Transportation Company and its personnel. It is approximately 15 miles in length, and includes paved roads, unpaved roads, and off-road conditions similar to those a motor transport operator might encounter in delivering his supplies. Facilities especially constructed for test purposes include an Operations Office, Motor Pool, Supply Point, and marked routes which require precision driving on the part of the motor transport operator. Approximately two hours are required to complete the course.

### Test Scenario

The scenario for the test is as follows. The motor transport operator reports to Operations to receive his mission and his map. He then goes to the Motor Pool to get his vehicle, performs his before operations inspection and servicing, and then drives off to the Supply Point to pick up supplies. At the Supply Point he inspects and signs a receipt for the cargo, supervises the loading of his truck, secures the cargo, and then proceeds to the Objective. At the Objective he supervises the unloading of his truck and has the receiver sign a receipt for the cargo. He then starts his return trip, following a different route than the one taken to the Objective. At the Supply Point he returns the signed receipt for cargo delivered. At the Motor Pool he completes necessary forms and performs after operations inspection and servicing of his vehicle. At Operations he reports on the results of his mission and reports any information which may be of intelligence value. While enroute to and from the Objective, he encounters a variety of road and terrain conditions and a variety of

normally infrequent but critical "crisis" situations, such as a blocked road, an ambush, an accident, etc. Ability to make field expedient repairs is tested at a separate station, outside the mission context, in order to minimize damage to equipment.

#### Conduct of Test

The operator is accompanied by an NCO rater during the entire test. The rater's primary job is to observe and evaluate the operator's performance and to briefly critique the operator at the conclusion of each test situation. In addition to observing and evaluating the operator's performance, the rater (1) plays the role of key support personnel, e.g., the NCO at the Supply Point, (2) initiates certain situations to which the operator must respond ("your left rear tire is flat"), and (3) when necessary, as for example when backing up, acts as the operator's assistant, or ground guide. In this latter role, the rater takes instructions from the operator. The rater assists the operator only if there is a clear and present danger to life or property.

#### Work Still To Be Done

With the completion of (1) the task list, (2) performance test for the basic skill level on the 2½ and 5 ton cargo trucks, and (3) a field course on which to conduct the test, the managers in the Supply and Transportation Battalion are well on their way to developing, implementing, and evaluating a comprehensive performance-oriented training program for the motor transport operator. The experience they acquired in this effort should facilitate their development of alternate forms of the test and course for other vehicles and for other skill levels. This experience should also facilitate their use of the same systematic approach in the development of task lists, performance tasks, and field courses for other MOSs in the DISCOM.

While the Phase I effort devoted very little time to the use of the MOS 64C test to diagnose skill deficiencies in operators, to the conduct of training to correct deficiencies, and to the evaluation of that training, how to deal with these issues, in a more general sense, was dealt with in Phases II and III of the R&D effort. Copies of the training materials resulting from Phases II and III were given to personnel of the Supply and Transportation Battalion. Study of this material should adequately prepare managers and trainers to complete the unfinished portions of the MOS 64C training program, as well as prepare them to conduct a similar effort for other MOSs.

APPENDIX A

Task List for  $\frac{1}{2}$  Ton Utility Truck

1

OPERATIONS

Skill Level I

Receives mission.

Receives map with route to be followed clearly marked.

Skill Level II

Makes a strip map or overlay map from a map on which route has been marked.

Identifies a point on a map when given its six digit grid coordinates.

Reports the six digit grid coordinates of a point on a map.

Identifies the location of military units on a map by "reading" their map symbols.

Skill Level III

Measures the straight line distance between two points on a map.

Measures the curved line distance between two points on a map.

Determines the elevation and slope of terrain from contour lines on a map.

Determines the conditions of roads, bridges, etc. from information on a map.

Determines hazardous areas from information found on a map.

Selects route to follow.

2  
MOTOR POOL

Skill Level I

Makes entries on DA Form 2400.  
Makes entries on DA Form 2404.  
Makes entries on DA Form 2408-1.  
Prepares radio for use.

Performs BEFORE operations inspection and servicing of truck/  
trailer.  
Installs/removes bows and soft top on truck/trailer.  
Installs/removes door and side curtains on truck.  
Installs/removes snow chains.  
Installs/removes deep water fording kit.  
Installs/removes radio on truck.  
Backs-up truck to trailer.  
Couples/uncouples trailer.  
Parks truck with/without trailer parallel to fuel pump.  
Uses authorized equipment to elevate truck/trailer and change wheel.

Performs Equipment Serviceability Criteria (ESC) inspection.

Skill Level II

Skill Level III

Prepares truck/trailer for shipment by rail or air.  
Prepares truck/trailer for air drop.



- 3. ENROUTE: MOTOR POOL TO SUPPLY POINT
- 9. ENROUTE: SUPPLY POINT TO MOTOR POOL

Skill Level I

Follows preselected route to Supply Point/Motor Pool.  
Executes hand signals.  
Responds to hand signals executed by others.  
Responds to US road signs.  
Responds to International road signs.

Drives truck with and without trailer on hard surface roads...  
all grades.

Drives truck with and without trailer through ice and snow.

Drives truck with fording kit through deep water.

Skill Level II

Responds to road signs indicating the location of military units.  
Drives truck with fording kit and towing trailer through deep water.

Tows vehicle of equal or lesser weight.

Skill Level III

SUPPLY POINT

Skill Level I

Inspects cargo.

Signs receipt for cargo.

Makes entries on DA Form 2400.

Secures receipt to be signed by person for whom the cargo is destined.

Backs-up truck with/without trailer into a loading dock.

Supervises loading of cargo into truck/trailer.

Lashes cargo in truck/trailer to prevent shifting.

Installs tarp over cargo in truck/trailer to protect cargo.

Skill Level II

Blocks and braces cargo in trailer to prevent shifting.

Skill Level III

- 5. ENROUTE: SUPPLY POINT TO OBJECTIVE
- 7. ENROUTE: OBJECTIVE TO SUPPLY POINT

Skill Level I

Follows preselected route to Objective/Supply Point.  
Responds to special signs...load capacity of bridges, overhead clearance.  
Avoids hitting objects which may result in damage or injury.  
Recognizes events and features which may be of intelligence value.  
Sends and receives messages on the radio.  
Measures the distance between two points using the truck's odometer.  
Assists a friendly vehicle that is in trouble  
Escapes an ambush.  
Drives truck with and without trailer on hard surface roads...all grades.  
Drives truck with and without trailer through ice and snow.  
  
Drives truck with fording kit through deep water.  
  
Drives truck with and without trailer across a dry ditch.  
Drives truck with and without trailer across a muddy/sandy ditch.  
Drives truck with and without trailer along a banked surface.  
Drives truck with and without trailer cross-country (off road).  
Drives truck with and without trailer through a "slalom" course.  
Drives truck with and without trailer through a narrow opening.  
Performs DURING operations inspection of truck and trailer.  
Cleans windshield, lights, radiator after completing "dirty" driving.  
Uses field expedient method to elevate truck/trailer and change wheel.

Skill Level II

Responds to road signs indicating the location of military units.  
Responds to road signs indicating mines, contaminated areas, etc.  
  
Drives truck with fording kit and towing trailer through deep water.  
  
Makes field expedient repair of broken distributor point spring.  
Makes field expedient repair of frozen fuel line.  
Makes field expedient repair of vapor locked fuel pump.

Skill Level III

Continues on mission despite obstacles.  
Disables or destroys vehicle and cargo if capture is imminent.  
Uses field expedient method to calculate load capacity of bridge.  
  
Extricates own truck when in a ditch using a wheel as a winch.

6

OBJECTIVE

Skill Level I

Delivers cargo to person (or unit) authorized to receive it.  
Secures a signature on receipt for cargo delivered.  
Makes entries on DA Form 2400.

Performs AT HALT inspection and servicing of truck/trailer.  
Couples/uncouples trailer.  
Backs-up truck with/without trailer into unloading dock  
Supervises unloading of truck/trailer.

Skill Level II

Skill Level III

8

SUPPLY POINT

Skill Level I

Returns signed receipt to NCO at Supply Point.  
Makes entries on DA Form 2400.

Skill Level II

Skill Level III

MOTOR POOL

Skill Level I

Makes entries on DA Form 2400.

Makes entries on DA Form 2404.

Makes entries on DA Form 2408-1.

Prepares radio for storage.

Performs AFTER operations inspection and servicing of truck/trailer.

Removes/installs bows and soft top on truck/trailer.

Removes/installs doors and side curtains on truck.

Removes/installs snow chains.

Removes/installs deep water fording kit.

Removes/installs radio from truck.

Backs-up truck with/without trailer into parking area.

Uncouple/couples trailer.

Parks truck with/without trailer parallel to fuel pump.

Uses authorized equipment to elevate truck/trailer and change wheel.

Performs Equipment Serviceability Criteria (ESC) inspection.

Skill Level II

Skill Level III

Prepares truck/trailer for shipment by rail or air.

Prepares truck/trailer for air drop.

11

OPERATIONS

Skill Level I

Reports on outcome of mission.  
Reports information of intelligence value.

Makes entries on Standard Form 91.

Skill Level II

Skill Level III

FIELD EXPEDIENTS

Skill Level I

Makes field expedient repair of leaking low-pressure line.  
Makes field expedient repair of loose battery clamp.

Skill Level II

Makes field expedient repair of broken fan blade.  
Makes field expedient repair of broken fan belt.  
Makes field expedient repair of leaking low-pressure line  
fitting.  
Makes field expedient repair of punctured fuel tank.

Skill Level III

Extricates another vehicle when in a ditch using a wheel as a winch.  
Makes field expedient repair of defective rear wheel (makes a skid).  
Makes field expedient repair of defective differential.  
Makes field expedient repair of defective front axle brake system.  
Makes field expedient repair of punctured, tube type, radiator core.



APPENDIX B

Task List for 2½ Ton Cargo Truck. 5 Ton Cargo Truck

1

OPERATIONS

Skill Level I

Receives a mission.

Receives map with route to be followed clearly marked.

Skill Level II

Makes a strip map or overlay from a map on which route has been marked.

Identifies a point on a map when given its six digit grid coordinates.

Reports the six digit grid coordinates of a point on a map.

Identifies the location of military units on a map by "reading" their map symbols.

Skill Level III

Measures the straight line distance between two points on a map.

Measures the curved line distance between two points on a map.

Determines the elevation and slope of terrain from contour lines on a map.

Determines the conditions of roads, bridges, etc. from information on a map.

Determines hazardous areas from information found on a map.

Selects route to follow.

MOTOR POOL

Skill Level I

Makes entries on DA Form 2400.  
Makes entries on DA Form 2404.  
Makes entries on DA Form 2408-1.

Performs BEFORE operations inspection and servicing of truck/  
trailer.  
Installs/removes bows and soft top on truck/trailer.  
Installs/removes snow chains.  
Couples/uncouples trailer.  
Parks truck, without trailer, parallel to fuel pumps.  
Uses authorized equipment to elevate truck/trailer and change  
single wheel.  
Uses authorized equipment to elevate truck/trailer and change  
outside dual wheel.  
Uses authorized equipment to elevate truck/trailer and change  
inside dual wheel.  
Backs-up truck to trailer.

Performs Equipment Serviceability Criteria (ESC) inspection.

Skill Level II

Parks truck, with trailer, parallel to fuel pumps.

Skill Level III

Prepares truck/trailer for shipment by rail or air.

- 3. ENROUTE: MOTOR POOL TO SUPPLY POINT
- 9. ENROUTE: SUPPLY POINT TO MOTOR POOL

Skill Level I

Follows preselected route to Supply Point/Motor Pool.  
Executes hand signals.  
Responds to hand signals executed by others.  
Responds to US road signs.  
Responds to International road signs.

Drives truck with and without trailer on hard surface roads...  
all grades.

Drives truck with and without trailer through ice and snow.

Drives truck with fording kit through deep water.

Skill Level II

Responds to road signs indicating the location of military units.

Drives truck with fording kit and towing trailer through deep water.

Tows vehicle of equal or lesser weight.

Skill Level III

SUPPLY POINT

Skill Level I

Inspects cargo.  
Signs receipt for cargo.  
Makes entries on DA Form 2400.  
Secures receipt to be signed by person for whom the cargo is destined.

Backs-up truck, without trailer, into a loading dock.  
Supervises loading of cargo into truck/trailer.  
Lashes cargo in truck/trailer to prevent shifting.  
Installs tarp over cargo in truck/trailer to protect cargo.

Skill Level II

Backs-up truck, with trailer, into a loading dock.  
Blocks and braces cargo in truck/trailer to prevent shifting.

Skill Level III

5. ENROUTE: SUPPLY POINT TO OBJECTIVE

7. ENROUTE: OBJECTIVE TO SUPPLY POINT

### Skill Level I

Follows preselected route to Objective/Supply Point.  
Responds to special signs...load capacity of bridges, overhead clearance.  
Avoids hitting objects which may result in damage or injury.  
Recognizes events and features which may be of intelligence value.  
Sends and receives messages on the radio.  
Measures the distance between two points using the truck's odometer.  
Assists a friendly vehicle that is in trouble.  
Escapes an ambush.  
Drives truck with and without trailer on hard surface roads...all grades.  
Drives truck with and without trailer through ice and snow.  
Drives truck, without trailer, across a dry ditch.  
Drives truck, without trailer, across a muddy/sandy ditch.  
Drives truck, without trailer, along a banked surface.  
Drives truck, without trailer, cross-country (off road).  
Drives truck, without trailer, through a "slalom" course.  
Drives truck, without trailer, through a narrow opening.  
Performs DURING operations inspection of truck and trailer.  
Cleans windshield, lights, radiator after completing "dirty" driving.  
Uses field expedient method to elevate truck/trailer and change single wheel.  
Uses field expedient method to elevate truck/trailer and change outside dual wheel.  
Uses field expedient method to elevate truck/trailer and change inside dual wheel.  
Drives truck with fording kit through deep water.

### Skill Level II

Responds to road signs indicating the location of military units.  
Responds to road signs indicating mines, contaminated areas, etc.  
Drives truck, with trailer, across a dry ditch.  
Drives truck, with trailer, across a muddy/sandy ditch.  
Drives truck, with trailer, along a banked surface.  
Drives truck, with trailer, cross-country (off road).  
Drives truck, with trailer, through a "slalom" course.  
Drives truck, with trailer, through a narrow opening.  
Drives truck with fording kit and towing trailer through deep water.  
Extricates own truck when in a ditch using winch.  
Makes field-expedient repair of broken distributor point spring.  
Makes field-expedient repair of frozen fuel line.  
Makes field-expedient repair of vapor locked fuel pump.

### Skill Level III

Continues on mission despite obstacles.  
Disables or destroys vehicle and cargo if capture is imminent.  
Uses field expedient method to calculate the load capacity of bridges.  
Extricates own truck when in a ditch using a wheel as a winch.

OBJECTIVE

Skill Level I

Delivers cargo to person (or unit) authorized to receive it.  
Secures signature on receipt for cargo delivered.  
Makes entries on DA Form 2400.

Performs AT HALT inspection and servicing of truck/trailer.  
Couples/uncouples trailer.  
Backs-up truck, without trailer, into unloading dock.  
Supervises unloading of truck/trailer.

Skill Level II

Backs-up truck, with trailer, into unloading dock.

Skill Level III

SUPPLY POINT

Skill Level I

Returns signed receipt to NCO at Supply Point.  
Makes entries on DA Form 2400.

Skill Level II

Skill Level III

MOTOR POOL

Skill Level I

Makes entries on DA Form 2400.  
Makes entries on DA Form 2404.  
Makes entries on DA Form 2408-1.

Performs AFTER operations inspection and servicing of truck/trailer.  
Removes/installs bows and soft top on truck/trailer.  
Removes/installs snow chains.  
Backs-up truck, without trailer, into parking area.  
Uncouples/couples trailer.  
Parks truck, without trailer, parallel to fuel pumps.  
Uses authorized equipment to elevate truck/trailer and change single wheel.  
Uses authorized equipment to elevate truck/trailer and change outside dual wheel.  
Uses authorized equipment to elevate truck/trailer and change inside dual wheel.

Performs Equipment Serviceability Criteria (ESC) inspection.

Skill Level II

Backs-up truck, with trailer, into parking area.  
Parks truck, with trailer, parallel to fuel pumps.

Skill Level III

Prepares truck/trailer for shipment by rail or air.



11  
OPERATIONS

Skill Level I

Reports on outcome of mission.  
Reports information of intelligence value.  
Makes entries on Standard Form 91.

Skill Level II

Skill Level III

FIELD EXPEDIENTS

Skill Level I

Makes field expedient repair of leaking low-pressure line.  
Makes field expedient repair of loose battery clamp.

Skill Level II

Extricates another vehicle when in a ditch using winch.  
Makes field expedient repair of broken fan blade.  
Makes field expedient repair of broken fan belt.  
Makes field expedient repair of leaking low-pressure line fitting.  
Makes field expedient repair of punctured fuel tank.  
Makes field expedient repair of broken shear pin (on winch).

Skill Level III

Makes field expedient repair of defective rear wheel (makes a skid).  
Makes field expedient repair of defective differential.  
Makes field expedient repair of defective front axle brake system.  
Makes field expedient repair of punctured, tube type, radiator core.  
Makes field expedient repair of defective tandem axle.

Extricates another vehicle when in a ditch using a wheel as a winch.

APPENDIX C

Task List for 5 Ton Tractor with 12 Ton Trailer

1

OPERATIONS

Skill Level I

Receives a mission

Receives map with route to be followed clearly marked.

Skill Level II

Makes a strip map or overlay from a map on which route has been marked.

Identifies a point on a map when given its six digit grid coordinates.

Reports the six digit grid coordinates of a point on a map.

Identifies the location of military units on a map by "reading" their map symbols.

Skill Level III

Measures the straight line distance between two points on a map.

Measures the curved line distance between two points on a map.

Determines the elevation and slope of terrain from contour lines on a map.

Determines the conditions of roads, bridges, etc. from information on a map.

Determines hazardous areas from information found on a map.

Selects route to follow.

MOTOR POOL

Skill Level I

Makes entries on DA Form 2400.  
Makes entries on DA Form 2404.  
Makes entries on DA Form 2408-1.

Performs BEFORE operations inspection and servicing of tractor/trailer.

Installs/removes bows and soft top on trailer.

Installs/removes snow chains.

Couples/uncouples trailer.

Parks tractor, without trailer, parallel to fuel pumps.

Uses authorized equipment to elevate tractor/trailer and change single wheel.

Uses authorized equipment to elevate tractor/trailer and change outside dual wheel.

Uses authorized equipment to elevate tractor/trailer and change inside dual wheel.

Installs/removes sideboards on trailer.

Packs-up tractor to trailer.

Performs Equipment Serviceability Criteria (ESC) inspection.

Skill Level II

Parks tractor, with trailer, parallel to fuel pumps.

Skill Level III

Prepares tractor/trailer for shipment by rail or air.

- 3. ENROUTE: MOTOR POOL TO SUPPLY POINT
- 9. ENROUTE: SUPPLY POINT TO MOTOR POOL

Skill Level I

Follows preselected route to Supply Point/Motor Pool.  
Executes hand signals.  
Responds to hand signals executed by others.  
Responds to US road signs.  
Responds to International road signs.

Drives tractor with and without trailer on hard surface roads...  
all grades.  
Drives tractor with and without trailer through ice and snow.  
  
Drives tractor with fording kit through deep water.

Skill Level II

Responds to road signs indicating the location of military units.  
  
Drives tractor with fording kit and towing trailer through deep water.  
  
Tows vehicle of equal or lesser weight.

Skill Level III

SUPPLY POINT

Skill Level I

Inspects cargo.  
Signs receipt for cargo.  
Makes entries on DA Form 2400.  
Secures receipt to be signed by person for whom the cargo is destined.

Supervises loading of cargo into trailer.  
Lashes cargo in trailer to prevent shifting.  
Installs tarp over cargo in trailer.

Skill Level II

Backs-up tractor, with trailer, into a loading dock.  
Blocks and braces cargo in trailer to prevent shifting.

Skill Level III

5. ENROUTE: SUPPLY POINT TO OBJECTIVE
7. ENROUTE: OBJECTIVE TO SUPPLY POINT

### Skill Level I

Follows preselected route to Objective/Supply Point.  
 Responds to special signs...load capacity of bridges, overhead clearance.  
 Avoids hitting objects which may result in damage or injury.  
 Recognizes events and features which may be of intelligence value.  
 Sends and receives messages on the radio.  
 Measures the distance between two points using the truck's odometer.  
 Assists a friendly vehicle that is in trouble.  
 Escapes an ambush.  
 Drives tractor with and without trailer on hard surface roads...all grades.  
 Drives tractor with and without trailer through ice and snow.  
 Drives tractor, without trailer, across a dry ditch.  
 Drives tractor, without trailer, across a muddy/sandy ditch.  
 Drives tractor, without trailer, along a banked surface.  
 Drives tractor, without trailer, cross-country (off-road).  
 Drives tractor, without trailer, through a "slalom" course.  
 Drives tractor, without trailer, through a narrow opening.  
 Performs DURING operations inspection of tractor and trailer.  
 Cleans windshield, lights, radiator after completing "dirty" driving.  
 Uses field expedient method to elevate tractor/trailer and change single wheel.  
 Uses field expedient method to elevate tractor/trailer and change outside dual wheel.  
 Uses field expedient method to elevate tractor/trailer and change inside dual wheel.  
 Drives tractor with fording kit through deep water.

### Skill Level II

Responds to road signs indicating the location of military units.  
 Responds to road signs indicating mines, contaminated areas, etc.  
 Drives tractor, with trailer, across a dry ditch.  
 Drives tractor, with trailer, across a muddy/sandy ditch.  
 Drives tractor, with trailer, along a banked surface.  
 Drives tractor, with trailer, cross-country (off-road).  
 Drives tractor, with trailer, through a "slalom" course.  
 Drives tractor, with trailer, through a narrow opening.  
 Drives tractor with fording kit and towing trailer through deep water.  
 Extricates own tractor when in a ditch using winch.  
 Makes field expedient repair of broken distributor point spring.  
 Makes field expedient repair of frozen fuel line.  
 Makes field expedient repair of vapor locked fuel pump.

### Skill Level III

Continues on mission despite obstacles.  
 Disables or destroys vehicle and cargo if capture is imminent.  
 Uses field expedient method to calculate the load capacity of bridges.  
 Extricates own tractor when in a ditch using a wheel as a winch.

OBJECTIVE

Skill Level I

Delivers cargo to person (or unit) authorized to receive it.  
Secures signature on receipt for cargo delivered.  
Makes entries on DA Form 2400.

Performs AT HALT inspection and servicing of tractor/trailer.  
Couples/uncouples trailer.  
Backs-up tractor to trailer.  
Supervises unloading of trailer.

Skill Level II

Backs-up tractor, with trailer, into unloading dock.

Skill Level III



8

SUPPLY POINT

Skill Level I

Returns signed receipt to NCO at Supply Point.  
Makes entries on DA Form 2400.

Skill Level II

Skill Level III

10  
MOTOR POOL

Skill Level I

Makes entries on DA Form 2400.

Makes entries on DA Form 2404.

Makes entries on DA Form 2408-1.

Performs AFTER operations inspection and servicing of tractor/trailer.

Removes/installs bows and soft top on trailer.

Removes/installs snow chains.

Backs up tractor, without trailer, into parking area.

Uncouples/couples trailer.

Parks tractor, without trailer, parallel to fuel pumps.

Uses authorized equipment to elevate tractor/trailer and change single wheel.

Uses authorized equipment to elevate tractor/trailer and change outside dual wheel.

Uses authorized equipment to elevate tractor/trailer and change inside dual wheel.

Removes/installs sideboards on trailer.

Performs Equipment Serviceability Criteria (ESC) inspection.

Skill Level II

Backs-up tractor, with trailer, into parking area.

Parks tractor, with trailer, parallel to fuel pumps.

Skill Level III

Prepares tractor/trailer for shipment by rail or air.

11  
OPERATIONS

Skill Level I

Reports on outcome of mission.  
Reports information of intelligence value.

Makes entries on Standard Form 91.

Skill Level II

Skill Level III

FIELD EXPEDIENTS

Skill Level I

Makes field expedient repair of leaking low-pressure line.  
Makes field expedient repair of loose battery clamp.

Skill Level II

Extricates another vehicle when in a ditch using winch.  
Makes field expedient repair of broken fan blade.  
Makes field expedient repair of broken fan belt.  
Makes field expedient repair of leaking low-pressure line fitting.  
Makes field expedient repair of punctured fuel tank.  
Makes field expedient repair of broken shear pin (on winch).

Skill Level III

Makes field expedient repair of defective rear wheel (makes a skid).  
Makes field expedient repair of defective differential.  
Makes field expedient repair of defective front axle brake system.  
Makes field expedient repair of punctured, tube type, radiator core.  
Makes field expedient repair of defective tandem axle.

Extricates another vehicle when in a ditch using a wheel as a winch.

APPENDIX D

Performance Test For Basic Skill Level  
2½ Ton Cargo Truck, 5 Ton Cargo Truck

NOTES TO GRADER

1. Any type of Driving inability should be noted in the Remarks i.e. poor shifting, riding the clutch, braking, etc.
2. Anytime that an individual receives an Amber or Red rating, it should be explained in the Remarks.
3. Any dangerous action or inappropriate action by the driver at any point not covered by the sheets should be put in one of the Tester Remarks.
4. Anytime the driver fails to maintain proper security with respect to the tactical situation, it should be noted in the Remarks.
5. Any suggestions to make the course more realistic should be forwarded on an extra sheet of paper to the NCOIC.

## DRIVER'S BRIEFING

You are about to depart on a Driver's Reaction Course. This course has been constructed with the idea of helping you, the driver, find your own individual weaknesses with respect to driving and also to let your unit know where their shortcomings lie. This course is to be taken as a simulated tactical situation and you should react accordingly.

At this time you are located in a secure area, deep behind friendly lines. In a short while you will be given a mission to perform; you will perform this mission as a tactical maneuver. Safety, however, must also be taken into account and at no time during this course will you be required or permitted to perform any tasks that would endanger anyone's safety. This course is designed to test you in both everyday, routine situations and in combat situations. You should undertake the mission with the idea that it is of extreme importance for your supplies to arrive at the supported unit.

The speed limit on this course is 25 MPH and will be strictly adhered to, but at the same time this is not to say that you will drive 25 MPH, when safety or road conditions dictate a slower speed. Every driver will have a grader or tester riding as his assistant who will grade you, the driver, on both how you react to situations and your general driving ability. The grader will be obeyed at all times and is the ranking man in the vehicle. He is not there, however, to help you drive the course, only to present and grade situations.

Should your vehicle break down, stay with it until the next vehicle comes along and ask them to send help. Remember that safety is our primary concern. Do you have any questions? Report to operations and receive your mission.

OPERATIONS BRIEFING  
(Tactical Situation)

Gentlemen, as you are new to this area, this is the general tactical situation. The First Brigade 7th Infantry Division is pushing back an expected ground attack on Fort Ord by the 3d Aggressor Division. After initial setbacks the Bayonet Division now has the foe on the run and supply for the thrust has fallen primarily on this unit's back. Our job is to keep the infantry going. In the last 24 hours the 2/17 of whom we are in general support has pushed forward from a line along Eucalyptus Road to a position just north of the Laguna Seca Raceway which has been badly damaged by high density shelling to include use of chemical munitions. Due to the rapid advance of the 2/17 the area between Eucalyptus Road and the 2/17's present position is not secure and you are subject to attacks from small pockets of resistance which have been bypassed. Two convoys have already received sporadic fire and the area shown here on the map (point out on map) is considered to be highly dangerous. The size of the enemy elements is generally between 2 and 5 personnel who are not expected to stand and fight. In any situation possible, your job is only to offer passive defense not to return fire.

Are there any questions on the tactical situation?

Missions will now be given to you.



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ARI TR-77-A10

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HQ 7th Supply & Transport Battalion  
Fort Ord, CA. 93941  
22 July 1975

OPORD (1-76)

References: (A) Fort Ord and Vicinity 1:25,000 Map

(B) Overlay # 1 (Truck Route to Supply Point)  
# 2 (Truck Route to B 2/17)

Time Zone: UNIFORM (PD.ST.)

TASK ORGANIZATION: Light Medium Truck Platoon

1. SITUATION: Friendly: Your unit 3d Light Medium Truck Platoon is located deep behind friendly lines in a secure location

Enemy: The 3d Aggressor Division has set up a defensive line just north of Laguna Seca Raceway and has a small element which has been bypassed located within our friendly lines

2. MISSION: 3d Platoon will deliver badly needed supplies and personnel to "B" Co. 2/17 as directed by the Company Commander

3. EXECUTION:

(A) Concept of Operation: 3d Platoon will move forward in one truck increments to supply "B" Co 2/17

(B) Element \_\_\_\_\_, you will report to the Motor Pool and depart NLT \_\_\_\_\_. From there you will travel to "A" Co 7th S&T Class II, IV and VII Yard located at \_\_\_\_\_. Pick up supplies and deliver them to "B" Co 2/17 located at \_\_\_\_\_. You will pick up any returnable available items and return them to the Supply Point and then return to the Motor Pool/Co. Operations. Both the route out and return route are clearly shown in Annex A.

4. SERVICE AND SUPPORT: Mission essential parts and POL will be provided by Bn Motor Pool.

5. COMMAND AND SIGNAL: Radio Silence will be maintained throughout the exercise. In cases of emergencies commo will be provided at the Motor Pool, Supply Point and at B Co 2/17. The Command Post will be located at the company motor pool/operations.

WILLIAMS  
Platoon Leader

Test Situation  
Operations Order

Situation (NCO tester reads to driver)

"This is your Operations Order which tells you what supplies to draw and where to deliver them. Attached is a marked map which shows the route you are to take, Look them over carefully. If you have no questions, go to the dispatcher and get your dispatch and vehicle."

Conditions

In the Transportation Company area in the field, the driver is given the Operations Order and a marked map by the NCO tester. The Operations Order or the marked map have one of the following items of information missing.

- 1) Time of departure
- 2) Location of Supply Point
- 3) Location of destination
- 4) Route to follow

Support

NCO tester

Operations Order

Route Map

Performance Measures

1. Reads Operations Order
2. Examines map
3. Detects missing item of information
4. Requests missing item of information

Test Situation  
Dispatch Documents

Situation (NCO tester reads to driver)

"here are your dispatch documents; Form 2400, Trip Ticket; Form 2404, Inspection and Maintenance Worksheet; and Form 2408-1, Daily Log. Your vehicle is # \_\_\_\_\_ located (give general area) of the Motor Pool. Make the initial entries in your Forms."

Conditions

NCO tester, acting as dispatcher, gives driver DA Forms 2400, 2404, and 2408-1. He gives driver the vehicle number and its location in the Motor Pool.

Support

NCO tester

DA Forms 2400, 2404, and 2408-1

Performance Measures

1. Makes initial entries on Form 2400
2. Makes initial entries on Form 2404
3. Makes initial entries on Form 2408-1.

Standard

Entries are complete and legible

Test Situation  
Before Operations Inspection and Servicing

Situation (NCO tester reads to driver)

"Get your vehicle ready to go to the Supply Point."

Conditions

The NCO tester accompanies the driver to the proper numbered vehicle in the Motor Pool. The vehicle assigned to the driver has one of the following immediately correctible defects:

Gas Cap missing  
Windshield wiper missing  
Loose wire making horn inoperable  
Fuel Tank nearly empty

The vehicle also has one of the following not immediately correctible defects:

Dented fender  
Cracked windshield  
(other defects as might be available)

Support

NCO tester  
2½ or 5 ton cargo vehicle  
Replacement parts or supplies for correctible items

Performance Measures

1. Performs Before Operations inspection and servicing.
2. Detects and corrects immediately correctible defects.
3. Enters not immediately correctible defects on DA Form 2404.

Test Situation  
Installation of Bows and Canvas

Situation (NCO tester reads to driver)

"Install bows, end curtains and paulin on that truck."

Conditions

Field

Support

NCO tester

2½ ton cargo truck with bows and canvas removed

Stave and corner assemblies, cross bows, paulin, and end curtains in a designated stowage area

Performance Measures

1. Remove stave and corner assemblies and cross bows from stowage area and assemble
2. Position each bow stake in the bow stake tubes and press the bows down to secure the stakes in the tubes
3. Place an end curtain in position, making certain the center of the lashing rope is in the center eyelet of the curtain
4. Wind the lashing rope alternately around the bow and through the eyelet in the curtain
5. Tie the ends of lashing ropes to lashing hooks
6. Install second end curtain in same manner
7. Place the folded paulin across the center bow with the end marked "front" toward the front of the truck body
8. Unfold the paulin and pull tight over the bows with the front and rear ropes
9. Tie down paulin lashing ropes to the lashing hooks on the body
10. Tie down paulin draw ropes to lashing hooks on the ends of the body

Standard

End bows and intermediate bows must be in proper stake tubes on M34. Bows for all other vehicles are interchangeable

Test Situation  
Change Front Wheel with Flat Tire

Situation (NCO tester reads to driver)

"The right front tire has gone flat."

Conditions

The NCO tester gives this situation to the driver at any time during the course, in the Motor Pool, at the Supply Point, at the Destination, or while enroute.

Support

2½ or 5 ton cargo truck with spare wheel, jack, and wrench  
NCO tester

Performance Measures

1. Uses handbrake to lock truck in position
2. Uses log or large rock to block opposite rear wheel to prevent truck from slipping
3. Loosens wheel nuts
4. Positions jack properly (depends on type of jack)
5. Elevates truck
6. Removes wheel nuts and wheel
7. Installs spare wheel
8. Tightens wheel nuts finger tight
9. Lowers truck and removes jack
10. Tightens wheel nuts
11. Stows defective wheel and jack
12. Removes block from rear wheel

Standard

Wheel change completed in 20 minutes

Test Situation  
Accounting for and Securing Cargo

Situation (NCO tester reads to driver)

"Your cargo is over there (point out). Back your truck up to it and I will help you load it. Sign this receipt."

Conditions

Loading area at Supply point with cargo  
Discrepancy between cargo to be loaded and cargo items listed on receipt:  
    Number of boxes differ  
    ID Number on boxes differ

Support

NCO tester to act as Supplyman  
A number of large boxes with weight and ID numbers stenciled on side  
One box in broken condition  
Rope sufficient to secure cargo in bed of truck  
Receipt for cargo  
2½ or 5 ton cargo truck

Performance Measures

1. Backs truck into loading area
2. Uses ground guide when backing
3. Inspects cargo
4. Inspects receipt
5. Detects discrepancy between cargo and receipt
6. Reports discrepancy to Supplyman
7. Detects broken box
8. Reports broken box to Supplyman
9. Requires correction in receipt before signing
10. Positions cargo in bed of truck
11. Lashes cargo in bed of truck

Test Situation  
Items of Intelligence Value

Situation (NCO tester does not alert driver to any item of intelligence value)

While enroute to and from the objective, the driver sees a number of items of intelligence value which either are not marked on his route map or would be of value to Transportation Company Operations.

Conditions

While enroute to or from the objective, the driver will have an opportunity to see one or more of the following:

Road closed....indicated by a sign at the road  
Bridge destroyed....indicated by a sign at the bridge  
Mine field....indicated by mine field markers  
Damaged vehicle in ditch

Support

NCO tester  
Signs or markers which indicate road closed, bridge destroyed,  
minefield  
Damaged vehicle

Performance Measures

Reports items seen to Operations SGT on return to Company  
Operations



Test Situation  
Ambush Expected

Situation (NCO tester will not alert driver on expected ambush)

Enroute to or from objective, driver will observe unusual conditions indicating possible ambush 500 yds to his front.

Conditions

Enroute to or from the objective, the driver notes one of the following:

Road block (logs, empty drums, etc.)  
Two or three aggressors armed with rifles  
Two or three civilians moving logs or empty fuel drums  
Sound of small arms fire  
Smoke

Support

One NCO tester  
Two or three personnel in civilian clothes or aggressor uniform  
Logs or empty fuel drums  
2½ or 5 ton truck

Performance Measures

1. Turns around and backtracks a safe distance.
2. Reports incident at nearest friendly unit.
3. Takes alternate route to next Checkpoint.\*

\* Supply Point or Objective depending on the point on the route where the sighting takes place.

Test Situation  
Symbols and Signs

Situation (NCO tester reads to driver)

"From time to time you will see signs at the side of the road.  
When we come to a sign, I will ask you what it means. You tell me."

Conditions

While enroute to or from the Objective, the driver will encounter the following signs along the side of the road. The driver will be evaluated on his (1) obedience to the sign, or (2) his understanding of the sign's message.

Signs to be obeyed

Speed Limit  
Stop

Signs to be understood

Overhead Clearance  
Weight capacity of bridge  
Minefield  
Road closed  
Bridge out  
Supply Point of a unit  
Command Post of a unit

Support

Signs as indicated above.

Performance Measures

1. Obeys signs
2. Understands sign's message

Test Situation  
Change in Location of Objective

Situation (Information given to driver by NCO informant only if requested by driver)

The battalion rear has moved to (show on map and on ground)

The best way to get there is to (show on map and on ground)

Conditions

When the driver arrives at the point on the ground where his map indicates the receiving unit is located, he finds that the unit is gone. An NCO (informant) is sitting in a  $\frac{1}{2}$  ton truck near the site.

Support

One NCO tester  
One  $2\frac{1}{2}$  or 5 ton truck  
One NCO informant  
One  $\frac{1}{2}$  ton truck

Performance Measures

1. Questions the NCO about the location of the receiving unit.
2. Questions the NCO about the route to the receiving unit.
3. Drives truck to the receiving unit.

Test Situation  
Adverse Conditions Driving

Situation (NCO tester reads to driver)

"Drive over that \_\_\_\_\_ (designate surface, ditch, etc.)"

Conditions

While enroute to or from the objective, the driver will be required to drive over the following surfaces:

Banked  
Dry ditch  
Muddy or sandy ditch  
Up a steep grade  
Down a steep grade  
Deeply rutted

Support

NCO tester  
2½ or 5 ton cargo truck

Performance Measures

1. Speed used
2. Gear used
3. Route followed (avoided ruts)

Test Situation  
Leadership Pressure

Situation

An Engineer Construction Staff Sergeant stops the driver and asks him to drop his present cargo and to use his truck to haul sand for a couple of hours.

Conditions

Field, or open stretch of road

Support

- 1 NCO to represent Staff SGT
- 1 NCO tester
- 2½ or 5 ton cargo truck

Performance Measures

1. Driver listens to request.
2. Driver respectfully declines request stating it is not part of his mission,  
  
or
3. Driver asks for permission from his own Hq (optional if communications are present).

Test Situation  
Releasing Cargo

Situation (NCO tester reads to driver)

"This is the battalion rear area where you are delivering your cargo. I represent the Supply Sergeant and you are delivering the load to me."

Conditions

Field area, off road, representing battalion rear area.

Support

NCO tester to act as Supply Sergeant  
Receipt for cargo  
2½ or 5 ton cargo truck

Performance Measures

1. Asks Supply Sergeant where he wants the cargo unloaded.  
(Supply SGT indicates he should back his truck to a spot and unload)
2. Uses ground guide when backing.
3. Unloads cargo and hands receipt to Supply SGT for checking.
4. Secures signature on receipt for cargo delivered.

Test Situation  
Assistance to Wrecked Vehicle

Situation

Driver comes upon a wrecked vehicle and is told to render assistance.

Conditions

Wrecked vehicle on side of road. Driver of wrecked vehicle is nearby and states, "I think my leg is broken."

Support

Wrecked vehicle (simulated)  
Injured driver  
NCO tester

Performance Measures

1. Places splint on injured leg using available materials.
2. Loads injured soldier into truck.
3. Takes him to nearest aid station.

Test Situation  
Ambush

Situation

Enroute to or from the Objective, the truck is fired upon by aggressors.

Conditions

Field

Support

One aggressor armed with rifle and one clip of ammunition  
One NCO tester  
2½ or 5 ton truck

Performance Measures

1. Drives through the ambush as fast as possible.
2. Reports incident at nearest friendly unit.



Test Situation  
Accident Reporting

Situation

Immediately after the truck passes through an intersection, direct the driver to pull off to the side of the road and stop. Then tell the driver:

"Assume that as you were crossing that intersection, another truck pulled out and hit and damaged your front fender. The other truck stopped, and I was the driver of the truck that hit you. Take whatever action you think is required."

Answer all of the driver's questions, but DO NOT volunteer any information. If possible, give factual answers to all questions, e.g. name, rank, serial number. If necessary, fabricate answers, e.g. the type of truck you were driving, the license number on your truck. Keep a record of the information that you give the driver so that you can compare the answers you provided with the information the driver entered on Standard Form 91.

Conditions

Road intersection

Support

NCO tester acting as driver of other truck  
2½ or 5 ton truck  
DD Form 518, Accident Identification Card (2 copies)  
Standard Form 91, Operator's Report of Motor Vehicle Accident

Performance Measures

1. Determines if NCO sustained injury. (NO)
2. Completes DD Form 518 and gives it to NCO.
3. Requests completed DD Form 518 from NCO  
(DO NOT GIVE TO DRIVER UNLESS HE REQUESTS IT)
4. Questions the NCO about the accident.  
(DO NOT VOLUNTEER INFORMATION, BUT ANSWER ALL QUESTIONS)
5. Completes Standard Form 91.

Test Situation  
Hitch Hiker

Situation

Young man or woman in civilian attire will be posted alongside of the road in the area of enemy activity, and will try to stop truck and ask for a ride.

Conditions

Field. If picked up he will pull a gun.

Support

One (1) person in civilian attire  
One (1) fake pistol

Performance Measures

1. Continues on mission without picking up hitch hiker.

Test Situation  
Precision Driving

Situation (NCO tester reads to driver)

"Enroute to Supply Point, you will come to various places which require you to exhibit special driving skill. As we come to each place, I will tell you what to do." (Example: drive through that mine field, narrow opening; or, make a U turn in this area without backing up; etc.)

Conditions

The NCO tester informs the driver about the special driving skills beforehand. He does not disclose how many or what the skills are. Each skill site should be marked with Engineer tape or other markers. As the driver approaches each skill site he is told specifically what to do by the NCO tester.

Support

NCO tester

Skill sites for following special driving:

- Diminished clearance
- Serpentine
- Offset - alley
- Straight line
- U turn
- Turn around

2½ of 5 ton cargo truck

Performance Measures

1. Diminished clearance (does not hit side markers)
2. Serpentine (does not hit side nor center markers)
3. Offset-alley (does not hit side markers)
4. Straight line (rides over each straight line marker)
5. U turn (does not hit side markers and does not back up)
6. Turn around (does not hit side markers and backs up only once)

Note: Backing and parking skills may be tested at the Motor Pool, Supply Point, or at the Destination.

Test Situation  
Removal of Canvas and Bows and Stowage

Situation (NCO tester reads to driver)

"Remove the canvas and bows from that truck and stow them properly."

Conditions

Field

Support

NCO tester

2½ ton cargo truck with paulin and end curtains installed

Stowage area, tent or building

Performance Measures

1. Untie all paulin lashing and draw ropes from the lashing hooks.
2. Make first fold of paulin on each side lengthwise until lower edge of paulin is even with top buckles
3. Make second fold lengthwise on both sides until both folds meet
4. Bring one folded side over the other fold
5. At each end, make an equal fold toward the center
6. Make another equal and fold until the folded paulin is supported only by the center bow
7. Remove paulin from the body
8. Untie the end curtain front and rear lashing ropes from the lashing hooks
9. Unwind the lashing ropes from the curtain and end bows and remove the curtains
10. Remove bows from bow stake tubes
11. Remove cross bows from stave and corner assemblies
12. Stow stave and corner assemblies, cross bows, paulin, and end curtains in a designated stowage area

Standard

Paulins and curtains must be dry before folding. All bolts and nuts must be replaced in stave and corner assemblies.

Test Situation  
After Operations Inspections and Servicing

Situation (NCO tester reads to driver)

"Park your truck there (point out)."

Conditions

Motor Pool area  
Facility for parallel parking (front and rear obstructions) or  
Facility for back-in parking (right and left obstructions)  
Facility for refueling

Support

NCO tester (may act as Dispatcher)  
2½ or 5 ton cargo truck

Performance Measures

1. Parks truck parallel, between front and rear obstructions  
or  
Backs truck into parking space between left and right obstructions.
2. Performs After Operations inspection and servicing.
3. Makes final entries on DA Form 2404.
4. Makes final entries on DA Form 2408-1.
5. Makes final entries on DA Form 2400.
6. Gives Dispatcher DA Forms 2404, 2408-1, and 2400.

Standard

Entries are complete and legible.

Test Situation  
Field Expedient Repair of Loose Battery Cable Clamp

Situation (NCO tester reads to driver)

"Your battery cable clamp is enlarged and will not keep contact with the battery terminal. Take whatever action is necessary to make it function properly. The only items that you can use are in this box."

Conditions

At the field expedient site, a battery, with an enlarged battery cable clamp is set up. The battery should be installed in a vehicle.

Support

NCO tester  
Vehicle battery with enlarged cable clamp  
Small box containing a nail and wrench for turning nut on clamp

Performance Measures

1. Inserts nail between clamp and terminal post
2. Tightens nut on clamp
3. Checks electrical circuit by sounding horn; switching on lights; etc.

Standard

Clamp is securely attached to terminal

**Test Situation**  
**Field Expedient Repair of Defective Line Coupling Nut**

**Situation** (NCO tester reads to driver)

"This line coupling nut is leaking. Take appropriate action to stop the leak. The only items available to you are in this box."

**Conditions**

A leaking line coupling nut is set up at a field expedient site. Tightening without the use of string or other packing material will not stop the leak.

**Support**

NCO tester

A fuel line with a leaking line coupling nut, connected to a water source.

A defective line coupling nut

A box containing wrench to fit the coupling nut and a piece of string

**Performance Measures**

1. Tightens nut with wrench, and failing to stop leak, the driver:
2. Loosens coupling nut and exposes tube next to connection.
3. Wraps string several turns around tube in the direction to lock coupling nut.
4. Tightens coupling nut over string enough to stop leak.

**Standard**

The leak is stopped. Driver will not be penalized if he starts with Performance Measure 2, and omits Performance Measure 1.

**Test Situation**  
**Field Expedient Repair of Leaking Fuel Tank**

Situation (NCO tester reads to driver)

"Your fuel tank has been punctured and is leaking. Repair it with the materials in that box."

Conditions

In a field expedient area, a leaking fuel tank is set up, and water is leaking out through a  $\frac{1}{2}$  inch hole.

Support

NCO tester

Fuel tank with a  $\frac{1}{2}$  inch hole

Box with the following:

Cloth and either a  $\frac{1}{4}$  or  $\frac{3}{8}$  inch dowel

Pocket knife and either a  $\frac{3}{4}$  or  $\frac{5}{8}$  inch dowel

Performance Measures

Plugs hole with cloth over end of  $\frac{3}{8}$  inch dowel;

or,

Plugs hole with  $\frac{5}{8}$  inch dowel whittled down to size.

Standard

The leak is stopped



Test Situation  
Field Expedient Change of Outside, Rear Dual Wheel

Situation (NCO tester reads to driver)

"Your left (right), outside, rear tire has just gone flat. Change the wheel by putting on your spare. Your jack will not work."

Conditions

NCO tester presents situation at a field expedient site

Support

NCO tester  
2½ or 5 ton cargo vehicle  
Rock or log which driver can position so inside rear wheel can be driven on to it, elevating the outside wheel  
Rocks or logs for blocking front wheels  
Tire wrench

Performance Measures

1. Pulls off to side of road
2. Places log or rock in front of (or in back of) inside rear wheel
3. Drives inside rear wheel on to log or rock
4. Uses handbrake to lock truck in position
5. Blocks front wheels to prevent slipping
6. Changes wheel

Standard

Performance Measure 6 may be omitted if driver has demonstrated he can change a wheel.

Test Situation  
Field Expedient Repair of Cracked Low-Pressure Oil or Fuel Line

Situation (NCO tester reads to driver)

"That fuel line (or oil line) is cracked and is leaking. Take action to stop the leaking. The materials available to you are in that box."

Conditions

A cracked fuel or oil line, through which water is leaking, is set up in a field expedient site.

Support

NCO tester  
Cracked fuel or oil line  
Box containing friction tape and pliable wire

Performance Measures

1. Wrap the line tightly with friction tape
2. Wrap over the tape with tightly wound wire

Standard

Leaking water stopped or reduced to a slow drip